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(54) Title: ASTAXANTHIN PRODUCTION USING FED-BATCH FERMENTATION PROCESS BY PHAFFIA RHODOZYMA

(57) Abstract: Disclosed is a fermentation method of astaxanthin using *Phaffia rhodozyma* comprising the steps of: (a) in the growing phase, feeding of a nutrient medium containing glucose or sucrose based on the specific growth rate (μ) of *Phaffia rhodozyma* cells, and (b) in the astaxanthin production phase, feeding of the nutrient medium based on the astaxanthin production rate, while keeping the glucose concentration in the fermentation broth almost 0 g/L during the whole fermentation period.